3rd UK-QFT Meeting: <i>Non-Perturbative Quantum Field Theory and Quantum Gravity</i>



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Manifest Causality and the Path Integral

Friday, 24 January 2014 14:00 (30 minutes)

We describe the calculation of manifestly-causal transition amplitudes over finite space-time domains. Specifically, we show how such amplitudes arise naturally within the path-integral representation of the Schwinger-Keldysh closed-time path formalism of non-equilibrium thermal field theory. We conclude by highlighting a difference in the resulting loop structure compared with the usual scattering-matrix case and discuss potential impacts on resummation.

Primary author: Dr MILLINGTON, Peter (University of Manchester)

Presenter: Dr MILLINGTON, Peter (University of Manchester)